

KNOWLEDGE AND ATTITUDE TOWARDS THE EXISTING LIVELIHOOD SYSTEMS OF TRIBAL FARMERS IN ANANTHAGIRI MANDAL OF VISAKHAPATNAM DISTRICT

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ABSTRACT

The knowledge and attitude of rural areas depends to a considerable extent on the livelihood of tribal farmers. The present study entitled "Knowledge and attitude towards the existing livelihood systems of tribal farmers". A total of 120 farmers were selected randomly from 6 villages for present study. The study revealed that most of respondents belonged to middle level of knowledge (45.00 %) and 34.17% respondents have high level of knowledge and 20.83% respondents have low level of knowledge. In attitude towards tribals farmers most of the respondents belonged to medium level of attitude (39.17%) and 25.83% respondents have high level of attitude and 35.00% respondents have low level of attitude. The study also revealed that the knowledge and attitude have positive and significant correlation with variables like age, education, farm Size, farming experience, annual income, tribe, training received, extension contact, mass media exposure, religious belief, social participation, risk orientation.

KEYWORDS: Knowledge; Attitude; Tribal; Livelihood

Article History

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INTRODUCTION

Andhra Pradesh occupies 8th position among the states having tribal population and has largest tribal population in the south Indian peninsula. Tribals belonging to aboriginal inhabitants of the forest and the high lands of Andhra Pradesh have been an inseparable part of the cultural, social and political history of Andhra Pradesh. Currently, there are 33 tribal groups with 5.9 million population in Andhra Pradesh as per 2011 census and most of them inhabit the traditional tribal areas also known as scheduled areas and every tribal group irrespective of its size of population, has a distinct and unique culture, tradition, and lifestyle of its own. The concentration of tribal population is very high in rural areas especially in mountain and forest zones of Eastern Ghats when compared to urban areas. The population density in tribal areas is 125 persons per sq.km as against 194 in the plain areas. (<https://en.vizag.wikipedia.org>). Soil health invokes the idea that soil is an ecosystem full of life that needs to be carefully managed to regain and maintain our soil's ability to function optimally (Aaryaa Raaj and Jahanara 2017). The tribal population is highly dependent on agriculture and horticulture for food security and income (Meena and Punjabi, 2012). The tribal population is highly dependent on horticulture for their livelihood. The tribal people earn by forestry, shifting cultivation, settle agriculture and horticulture and industrial labour, animal husbandry, fishing, traditional commerce including handicraft. Most of

the tribal, whether young or old have limited knowledge about modern horticultural methods and food production (Nidheesh, 2010)

RESEARCH METHODOLOGY

The research design opted for the study is descriptive research design. The present study was conducted in Ananthagiri Mandal Visakhapatnam district of Andhra Pradesh state, was selected purposively based on considerable number of respondents. From Ananthagiri Mandal a total of 6 Villages i.e., Tattapudi, Kothavalasa, Venkayyapalem, Yerrametta, Chintapaka and Laxmipuram were selected randomly for the present study.

OBJECTIVES OF THE STUDY

1. Knowledge and attitude towards the existing Livelihood System of Tribal Farmers

Table 1: Socio-Economic Profile of Tribal Farmers (N=120)

S.No	Variable	Category	f	%
1	Age	Low(up to 35)	30	25.00
		Medium(36-55)	71	59.20
		High(above 55)	19	15.80
2	Education	Low	82	68.33
		Medium	31	25.84
		High	7	5.83
3	Farm size	Low(2-7 acre)	41	34.16
		Medium(7-12acre)	52	43.33
		High(12-17acre)	27	22.51
4	Farming experience	Low(up to 5 year)	31	25.80
		Medium(6-10 year)	52	43.40
		High(above 10 years)	37	30.80
5	Annual income	Low(up to 60000)	35	29.16
		Medium(Rs 60001-120000)	42	35.00
		High(above 120000)	43	35.84
6	Extension contact	Low(8-15)	35	29.16
		Medium(15-22)	65	54.16
		High(22-29)	20	16.68
7	Mass media exposure	Low(12-19)	30	25.00
		Medium(19-26)	49	40.83
		High(26-33)	41	34.17
8	Religious belief	Low(10-16)	18	15.00
		Medium(16-22)	36	30.00
		High(22-28)	66	55.00
9	Social participation	Low(12-19)	20	16.67
		Medium(19-26)	72	60.00
		High(26-33)	28	23.33
10	Risk orientation	Low(5-9)	40	33.33
		Medium(9-13)	45	37.50
		High(13-17)	35	29.17

RESULTS AND DISCUSSION

1. Knowledge towards Existing Livelihood of the Respondents

Based on the data collected through the independent variables and appropriate analysis the respondents are categorized into three levels and are represented in the below table.

Table 2: Distribution of Respondents according to their Knowledge

S.No	Particulars	Fully Correct	Correct	Not Correct
		f %	f %	f %
	Agriculture			
1.	Recommended seed rate for direct seeded paddy per acre 10-15kg/acre	45 37.50	75 62.50	-
2.	Paddy seeds should be treated with the fungicide at the time of sowing	35 29.16	85 70.84	-
3.	Brittleness and brick red colour of older leaves in paddy nursery is due to zinc deficiency.	15 12.50	68 56.67	37 30.83
4.	Harvesting in mango is difficult due to red ants	40 33.33	56 46.66	24 20.01
5	Pruning of the dried twigs and branches should be done during June - July	31 25.84	73 60.83	16 13.33
6.	Pesticide granules used in rice against stem borer are carbofuran granules	37 30.83	69 57.50	14 11.67
7.	Pruning in mango encourages production of new shoots	57 47.50	47 39.16	16 13.34
8.	Shot holes on maize leaves is caused by maize stem borer	38 31.66	62 51.66	20 16.68
9.	Excess use of nitrogenous fertilizers in paddy increases insect pests	41 34.16	53 44.18	26 21.66
	Nonfarm activities			
10.	Collection of tendu leaves lasts for about 6 weeks	53 44.16	55 45.84	12 10.00
11.	Mature tendu leaves are collected 45 days after pruning	29 24.16	61 50.84	30 25.00
12.	The best quality of gum is produced during 2 -3 months	31 25.83	57 47.50	32 26.66
13.	Bee wax is prepared from damaged or insect eaten comb	17 14.16	46 35.00	61 50.84
14.	Soap nut is used as a dish wash detergent	20 16.66	45 37.50	55 45.84
15.	Bee wax is prepared by melting the bee comb in hot water	57 47.50	63 52.50	-
	Animal Husbandry			
	a) Dairy Farming			
16.	Gestation period of cow is 283 days	55 45.83	55 45.83	10 8.34
17.	Dry period of dairy animals is 2 months	53 44.16	53 44.16	14 11.68
18.	Body weight improvement was the best method for pregnancy diagnosis	21 17.50	50 41.66	49 40.84
19.	Age of calf to give foot and mouth vaccine is 4-6 months	42 35.00	40 33.33	38 31.67
	b) Back Yard Poultry Farming			
20.	Incubation period for chicken eggs is 21 days	61 50.83	59 49.17	-
21.	Optimum temperature within a poultry house is 37 ⁰ C	47 39.16	52 43.33	21 17.51
22.	Denailing reduce wing rot.	49 40.83	35 29.17	36 30.00
23.	Best time to vaccinate laying birds is 6 wks of age old chick	30 25.00	40 33.33	50 41.67
24.	Best time to transfer birds from grower to layer house is 18 -20 weeks	67 55.83	33 27.50	20 16.67
25.	Very large or very small eggs do not hatch well	52 43.33	20 16.67	48 40.00

 f = frequency; %= percentage

Table shows that 55.83% of respondents are best time to transfer birds from grower to layer house is 18 -20 weeks. 62.50% of respondents are recommended seed rate for direct seeded paddy per acre 10-15kg/acre. 50.84% of respondents are bee wax is prepared from damaged or insect eaten comb. Similar findings are also reported by (Jiji and Vijayan 2012).

Table 3: Distribution of Respondents based on overall their Knowledge

S.No	Knowledge	Frequency	Percentage
1	Low knowledge (25-41)	25	20.83
2	Medium knowledge(42-58)	54	45.00
3	High knowledge(59-75)	41	34.17
Total		120	100.00

From the above table 3 it is evident that most of the respondents (45.00%) have medium levels of overall knowledge status followed by (20.83%) of the respondents have low levels of overall knowledge status followed by (34.17%) of the respondents have high levels of overall knowledge status (Bihari 2012).

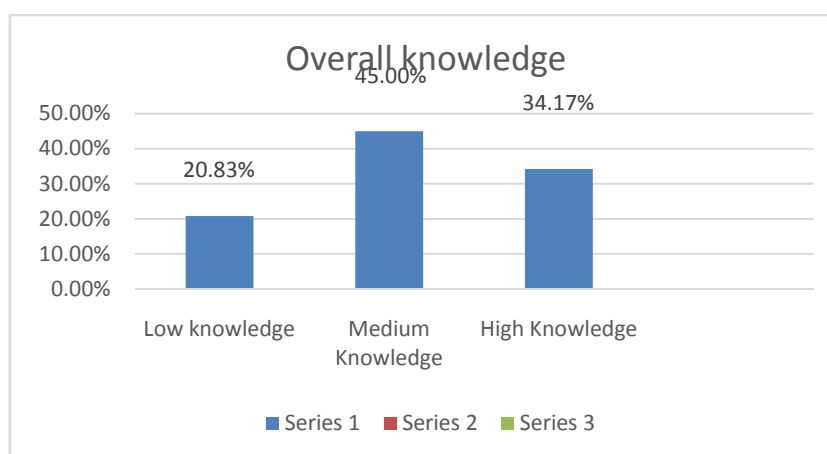


Figure 1: Distribution of Respondents based on Overall their Knowledge.

2. Attitude towards Existing Livelihood of the Respondents

An attempt was made to find out the attitude of respondents towards their existing livelihood systems in terms of their varying degrees of positive impressions. The results were furnished in the Table 4.2

Table 4: Distribution of Respondents According to their Attitude

S.No	Statements	Agree	Partially Agree	Disagree
	I. Agriculture	<i>f</i> %	<i>f</i> %	<i>f</i> %
1	Proud to be an Agriculturist	20 16.67	100 83.33	-
2	Investing in agriculture was of no use	37 30.83	42 35.00	41 34.17
3	Technical and financial assistance	28 23.33	46 38.33	46 38.34
4	Sustainable livelihood	46 38.33	42 35.00	32 26.66
5	Noble and respectable activity	45 37.50	35 29.16	40 33.33
6	Costs of inputs	31 25.83	41 34.17	48 40.00

Table 4 Contd.,

7	Agriculture is our right given by our ancestors	56 46.66	40 33.33	24 20.00
8	Capital investment	40 33.34	40 33.33	40 33.33
9	Recognition of tribal farmers in the society	30 25.00	50 41.67	40 33.33
10	Traditional agriculture is better than modern agriculture	48 40.00	52 43.33	20 16.67
11	Increases the fertility of soil	35 29.16	60 50.00	25 20.83
12	Additional income in limited space	40 33.33	50 41.66	30 25.00
13	Vegetable farming	45 37.55	47 39.16	28 23.29
14	Pest control techniques.	35 29.16	25 20.83	40 33.34
II Non-Farm Activities				
15	Forest as economic livelihood.	47 39.16	50 41.66	23 19.18
16	NTFPs provide local job opportunity	37 30.84	40 33.33	43 35.83
17	Collection of NTFP	21 17.50	40 33.33	59 49.17
18	Non-timber forest products	47 39.16	23 19.16	50 41.68
19	Lack of employment opportunities	41 34.17	45 37.50	34 28.33
20	Bee keeping is a skill	100 83.33	-	20 16.67
21	Bee keeping doesn't require lot of labour	52 43.33	68 56.67	-
III. Animal husbandry				
22	Traditional methods of dairy farming	40 33.33	80. 66.66	-
23	Modern dairy methods give good income.	48 40.00	52 43.33	20 16.67
IV. Dairy Farming				
24	Investment	25 20.84	41 34.16	54 45.00
25	Right place in the society	40 33.33	55 45.83	25 20.84
26	crop production	45 37.50	52 52.34	23 19.16
27	Good breed of cattle / buffaloes to his herd for getting more milk and profit	40 33.33	80 66.66	-
V Backyard poultry				
28	litter can be used as a manure	65 54.16	35 29.16	20 16.68
29	Housing costs for rearing are exorbitant	23 19.16	45 37.50	52 43.33
30	inexpensive feeds	40 33.33	26 21.66	54 45.00
31	market potential for good quality chicken	65 54.16	30 25.00	25 20.84
32	vulnerable for many diseases	37 30.83	53 44.16	30 25.01

f= frequency; %= percentage

The attitude towards their existing livelihood is related to agriculture were explained. The involvement of the respondents related to agriculture was recorded. Based on the data collected and analysed the respondents were grouped into three categories on their level of attitude are presented in the below table 4.2.1, Similar findings are also reported by (Sutariya, B. A. 2015).

Table 5: Distribution of respondents According to their Overall Attitude towards their Existing Livelihood Systems

S.No	Level of Attitude	Frequency	Percentage
1	Less favourable attitude (34-54)	31	25.83
2	Moderately favourable attitude(55-77)	47	39.17
3	High favourable attitude(76-96)	42	35.00
Total		120	100.00

(n=120)

From the above table 5 it is evident that most of the respondents (39.17%) have moderately favourable levels of overall attitude status followed by (20.83%) of the respondents have less favourable levels of overall attitude status followed by (34.17%) of the respondents have high favourable levels of overall attitude status. (Zhang 2014).

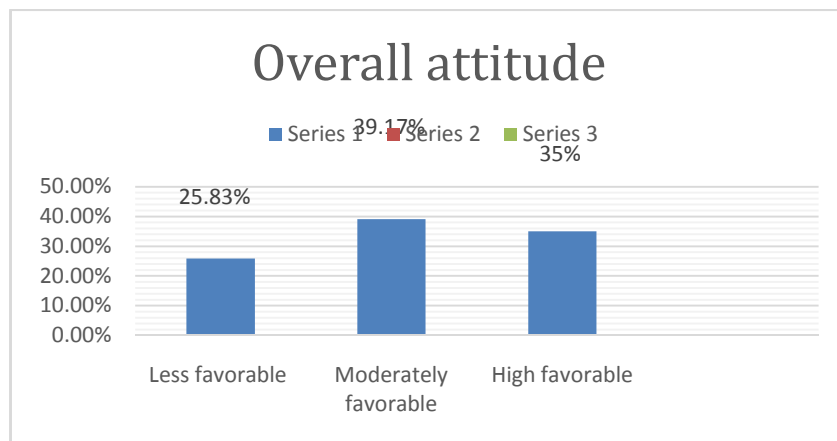


Figure 2: Distribution of Respondents based on Overall their Attitude

Table 6: Relationship between Socio Economic and Knowledge of Tribal Farmers.

Sl. No.	Independent Variables	Correlation Coefficient (r)
1.	Age	0.7071**
2.	Education	0.6893**
3.	Farm size	0.3845**
4.	Farming experience	0.9546**
5.	Annual income	0.8370**
6.	Extension contact	0.6084**
7.	Mass media exposure	0.9995**
8.	Religious belief	0.4258**
9.	Social participation	0.9047**
10.	Risk orientation	0.4474**

** = Significant at 1 per cent level of probability

* = Significant at 5 per cent level of probability

S = Significant

It could be seen from table 6 that ten independent variable namely age, education, farm size, farming experience, annual income, extension contact, mass media exposure, religious belief, social participation, risk orientation were significant and positively correlated with knowledge. The null hypothesis is rejected.

Table 7: Relationship between Socio Economic and Attitude of Tribal Farmers.

SL. No.	Independent variables	Correlation coefficient (r)
1.	Age	0.5906**
2.	Education	0.5704**
3.	Family size	0.2388**
4.	Farming experience	0.8979**
5.	Annual income	0.9108**
6.	Extension contact	0.4798**
7.	Mass media exposure	0.9925**
8.	Religious belief	0.5592**
9.	Social participation	0.8290**
10.	Risk orientation	0.3054**

** = Significant at 1 per cent level of probability

* = Significant at 5 per cent level of probability

S = Significant

It could be seen from table 7 that ten independent variable namely age, education, farm size, farming experience, annual income, extension contact, mass media exposure, religious belief, social participation, risk orientation were significant and positively correlated with knowledge. The null hypothesis is rejected,

CONCLUSION

It is concluded from the study that most of the respondents have belonged to middle age group, this shows that respondents are interested in agriculture. Most of the respondents have received formal education and completed primary school, have medium levels of annual income, have agriculture as their main occupation and live in cemented houses. Most of the respondents has own land and are working as agriculture labour present in their own farm, most of the people are trained in farm practices, medium level of the respondents of extension contact, medium level of respondents are having mass media exposure, medium level of respondents are in religious belief, most of the respondents are belonging to social participation, medium level of respondents are in risk orientation. When coming to the livelihood of tribal farmers can be concluded that most of the respondents play a medium role in knowledge and attitude towards existing livelihood in agriculture. In knowledge and attitude towards existing livelihood have positive and significant correlation with all independent variable like age, education, farm size, farming experience, annual income, training received, extension contact, mass media exposure, religious belief, social participation, and risk orientation.

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